Welcome to

Systems Thinking: Modeling Complexity
Syllabus for 2007

The Adizes Graduate School

Dr. Bruce LaRue
bruce@provarus.com
Phone (253) 576-7100, by appointment

Course Description
This course will provide participants with a theoretical and practical introduction to a field that has emerged in recent decades from the natural sciences, and has recently begun to penetrate the management and social sciences. Systems thinking, and in particular complexity theory, has begun in recent years to challenge the mechanistic paradigm based on hierarchy, control, reductionism, and predictability with one of complex adaptive systems that co-evolve with their environment and self-organize as they are pushed far from equilibrium. Emerging from recent advances in our understanding of the biological sciences, current debates in the field of complexity theory revolve around the unique distinctions among biological organisms and human social systems. Themes we will cover in this course include:

- The historical evolution of systems thinking and complexity science
- How the process of biological evolution differs from human learning, cognition, and communicative action
- Implications of complexity theory for individual development, organizational change, and leadership
- Implications of complexity theory for economic and environmental sustainability

Objectives
Students will gain a deeper understanding of the principles of systems thinking and complexity theory, and will explore how to apply this new understanding to personal development, leadership, organizational change, and the sustainable evolution of human society.

Required Reading List
In a direct reflection of our world, the literature for the application of systems thinking to personal, organizational, and social change is enormous and growing daily. The references, while required, only skim the surface. They are intended to examine systems thinking from a variety of biological, cognitive, social, and organizational perspectives. They reflect the notion that only systemic change, grounded in critical thinking and dialogue, can create a sustainable form of personal, organizational, and societal evolution.

It is important to note that I have carefully chosen readings that are new enough to be leading edge, while being around long enough to withstand the critical test of scholar/practitioner critique. I nonetheless encourage you to explore the additional resources I have provided in the final section of this syllabus, in particular – Adizes material will be essential for the synthesis paper - as well as those resources of your own choosing, and integrate these into your work in this course. Dr. Adizes is looking forward to seeing the synthesis papers from this course.

Required Readings:

Stacey, Ralph D., Strategic Management and Organisational Dynamics (5th Edition) (Paperback - Feb 20, 2007)

Dr. LaRue to post electronic resources in classroom (TBA):

Selected recent publications from E. Mitleton-Kelly:
http://www.psych.lse.ac.uk/complexity/publications.html

Highly Recommended Readings:

Hock, D. (2000). "The Art of Chaordic Leadership." *Leader to Leader* Winter 2000(15): 20-26.

Capra, F. (2002). *The hidden connections : integrating the biological, cognitive, and social dimensions of life into a science of sustainability*. New York, Doubleday.

Also review publications from The Santa Fe Institute: http://www.santafe.edu/

Course Requirements
Participants will be required to post formal papers and to respond to the work of their colleagues during the week following posting of assignments. This feedback is a course requirement, and will be assessed accordingly.

I will offer helpful and critical feedback on your work. However, you are responsible for completing assignments by the due date, and for active participation in the course discussion. Late papers, regardless of reason, do not receive the same consideration (that is, feedback) as those submitted on time.

To a great extent, the quality of your own participation in this seminar will guide the discussion of the course and help determine how much you and your colleagues learn. We will assume that there is much we can learn from each other in a collaborative setting as well as from published literature. You will consequently be evaluated on both the quality of your written assignments and on the timeliness and quality of your responses to the papers written by your peers. Adding to the content of the paper by citing additional data or material from the reading assignments and other reading materials will be a major consideration in the grading process.

Assignment Guidelines
I realize that we are all busy professionals who face business trips, illnesses, overload, and computer glitches – but be aware that the responses and learning of your peers depends upon your timely contributions. Please let us know as soon as possible – that is sooner rather than later – if you are unable to post an assignment, feedback or response. ***Nothing is more deadening than silence in this medium.*** Remember that persistent late postings will negatively affect your grade as well as the overall quality of learning that takes place in this course. Re-read The Norms of Working Online.

   A. Papers are to be written in **APA format** (American Psychological Association Publishing Manual) and a "page" is assumed to be approximately 500 words in length using a legible, 12-point font. *Papers are to be free of spelling errors, and use appropriate grammar, syntax*, and *punctuation.*.

   B. E-mail me and your colleagues as soon as possible if a situation arises that will effect a due date or your peers, and post a message to the group. Remember to post substantive messages and feedback regularly; your colleagues will greatly appreciate it. You also lose at least 1/3 grade point for each *announced or unannounced* late posting, so PLEASE be sure to watch the due dates!

   C. I will post this syllabus and the assignments as major topic areas within the group forum. Please post your papers as the next level of response to the appropriate topic assignment. That way, responses to the papers become the third level (replies to the papers), and so on. Group work is best addressed in folders.

   D. Please review the descriptions of the assignments while you work on them and before you post your assignment. A common mistake is to become involved in a wonderfully intriguing idea - and not address the assignment requirements.

The Oasis Cafe
This is your space to relax – an informal and casual conversation area where discussion about group frustrations, successes, personal interests, and other informal conversation may be indulged in to your soul's delight.

Grades (see catalog)

Pass with Distinction. This person met and exceeded the requirements of the assignment in a timely manner, posted regularly with sensitivity, understanding, insight, constructive criticism, and caught the high points ("got it"). This person added something to the learning of the group, brought in additional references, and made me think. This grade requires one to go beyond reading and reciting to critical analytic thinking, synthesis, application, and abstract reasoning. This grade is awarded to candidates whose work expresses unusual or unique creativity and individuality of thought when compared to the work of most individuals engaged in advanced graduate study. This individual regularly provides insightful feedback to peers, and assignments are well structured, well researched and on time. (A+)

High Pass. This grade is awarded to participants whose work is well above average compared to the work of others in the program and at a graduate level of scholarship, whose participation and feedback meet expectations, and who develop creative lines of thought. (A, B)

Pass. This person adequately meets the requirements of the assignment and posts assignments and responses on time with only a couple of exceptions. This grade is awarded to participants whose work is satisfactory when compared to the work of others in the program; student may exhibit occasional difficulties with timeliness of work, providing thought-provoking feedback to peers or development of creative lines of thought. (B-, C)

Fail. This person misses major points, shows insensitivity, and has a pattern of late postings. Consistent problems occur, including late or nonexistent postings, poor feedback to partners, a tendency to focus on problems rather than solutions, and lack of comprehension of course material. Assigned to students whose work does not meet the performance standards for the course. This includes quality of work, online participation requirements and attendance. Students with significant problems will be advised by faculty and administration at mid-term and may choose to withdraw and receive an "incomplete" and partial refund, instead of a failing grade. In either case, individuals may repeat the course one time. If they do not pass the second time, they may not advance in the degree program.

Weekly Assignments
The course requirements consist of a brief introduction, weekly reading, formal presentations, and feedback to written assignments. While course assignments and expectations are explained as clearly as possible, please do not hesitate to ask for clarification if needed. I may also help to guide our dialogue by asking "thematic questions" that will serve as topics for discussion. 'These will be posted as we proceed through the course.

Week One
This is an informal week involving discussion of the syllabus, the structure of the group and introduction of the participants. Please write a brief introduction, including your particular interests in this course and the Adizes program. In addition, please describe your learning goals for this course and how you intend to apply what you learn to your personal and professional life.

I will divide you into teams. These teams will become your primary work groups throughout the course. As you will see, this does NOT mean that you will be required to perform collaborative group projects in this course. Rather, it means that while Team A posts formal assignments based on required reading materials, Team B will be required to post follow-up feedback assignments to Team A based on the same readings. Of course, should all or part of any team decide to collaborate on these assignments, they are free to do so.

Assignment: All participants are to read the following articles and post a 1000 word reflective commentary:

Mitleton-Kelly, E. – selected reading TBA

Week Two

Provide feedback to at least two other colleagues on their reflections on Week One readings at least 400-500 words each in length. Your comments should be both supportive and substantive, drawing from the article as well as your personal and professional experience.

Week Three

Team One is to lead a discussion on the Stacey book, about the first 200 pages, each team member writing an essay of approximately 1500 words in length. Individual team members may choose to collaborate on this assignment if desired, each contributor should write a minimum of 1000 words each in such a collective essay. Team Two should read this section, respond to Team One, and may post general comments or insights gained. Contact me if you have not received your books by now.

Week Four

Each individual from Team Two should write a feedback response to Team One. This response should be approximately 750-1,000 words in length, contain references and substantive comments/critique, and draw from both your personal and professional experience whenever possible. Team One should engage with Team Two on their posts.

Week Five

Team Two should write a reflective essay of approximately 2,000-2,500 words on pages (approximately) pages 201-400 in the Stacey book. Team One should read this section and post any general comments, insights gained. Follow instructions from Week Three.

Week Six

Individuals from Team One should write a feedback/commentary of approximately 750-1,000 words on the Team Two essay. Feedback should be a substantive critique and include references from the reading material, drawing from your personal and professional experience when possible. Team Two should engage with Team One.

Week Seven

A. All students post essays on the last 100 pages of the Stacey book, synthesizing conclusions, each team member writing an essay of approximately 750-1000 words in length. Individual team members may choose to collaborate on this assignment if desired, each contributor should write a minimum of 750-1000 words each in such a collective essay. Provide feedback to each other's conclusions during the week.
B. Begin work on your Synthesis Project

Synthesis Paper: Each participant is to write a reflective essay of approximately 1,800-2000 words on the key elements of what you have learned in the course and how you intend to apply this learning in practice. If possible, draw from a real-life organizational issue or initiative and explore how you will approach this issue differently based on what you have learned. If the issue or initiative is significantly complex, write this paper as a proposal for action that will be submitted to your organization.

Adizes Methodology Critique: Include a section in your Synthesis Paper that specifically addresses the Adizes methodology in light of what you have learned in this course. For example, ask yourself a question on Adizes methodology and answer it in a portion of your paper. Discuss or critique the Adizes model, or an aspect of it, with regard to its overall sufficiency, or in a specific situational context based on the concepts learned in this class. Compare to other models if you wish. This is good preparation for your dissertation work. You might ask yourself either a very specific or a very general question. For example: Do

Adizes concepts, such as PIPs, POCs, and/or CAPI model aspects of an adaptive sustainable system for organizational or societal management and development? Do specific aspects of the methodology, such as PAEI roles or the function of rewards or mission, support or hinder personal, organizational, and/or societal evolutionary processes, and how might the process or method be improved? Does the model integrate concepts of critical thinking and dialogue as evolutionary processes?

This paper should be appropriately <u>referenced</u>, draw from course resources, external sources, and from your personal and professional experience. This Synthesis Paper to be posted next week is a **draft**, which will be submitted as your final paper in Week Ten. Be sure to cite proper page numbers for material taken from the Adizes texts. Dr. Adizes will review these papers after the course concludes.

Week Eight
    A. Continue previous discussions.
    B. Post the most up-to-date version of your Synthesis Project

Week Nine
Each participant is to provide feedback to at least two other group members, approximately 500-700 words each. Be specific as to how your colleagues' Synthesis Papers can be strengthened for final submission in Week Ten.

Week Ten
Submit final Synthesis Papers. Continue discussions from Week Nine.

Week Eleven

A) Provide feedback on the course using the Course Evaluation provided by faculty. Forward this directly by e-mail to Stephanie@Adizes.com. Grades will not be released without this last assignment.

B) Also submit copies of your final Synthesis Paper to Stephanie@Adizes.com for Dr. Adizes to review.

Bibliography and Course Resources

Electronic Resources

London School of Economics project on complexity http://www.psych.lse.ac.uk/complexity/

London School of Economics Publications on complexity theory
http://www.psych.lse.ac.uk/complexity/publications.htm

Resources from Business.com on complexity theory
http://www.business.com/directory/management/management_theory/complexity_theory/hock,_dee/

Learnativity.com on complexity theory
http://agelesslearner.com/intros/complexity.html

Learnativity.com on chaordic organization
http://www.learnativity.com/chaordic.html
Society for Organizational Learning
http://www.solonline.org/

Sony labs in Paris are trying to answer the question 'How do words get their meanings?' In order to do this they regard language as a complex adaptive system that self-organises and evolves driven by the distributed local interactions of language users.

http://talking-heads.csl.sony.fr/InfoIndex.html

The Plexus Institute focuses particularly on complexity informed approaches to health care
www.plexusinstitute.org

The Institute for the Study of Coherence and Emergence publishes a journal called Emergence
www.emergence.org

The Complexity and Management Centre at the University of Hertfordshire
www.herts.ac.uk/business/research.htm

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